DS-CM-8

ORDERCODE D2182

SHOWELECTRONICS FOR PROFESSIONALS

Congratulations!
You have bought a great, innovative product from DAP Audio.
The DAP Audio DS-CM-8 brings excitement to any venue. Whether you want simple plug-&-play action or a sophisticated show, this product provides the effect you need.

You can rely on DAP Audio, for more excellent audio products.
We design and manufacture professional audio equipment for the entertainment industry.
New products are being launched regularly. We work hard to keep you, our customer, satisfied.
For more information: iwant@dap-audio.info

You can get some of the best quality, best priced products on the market from DAP Audio.
So next time, turn to DAP Audio for more great audio equipment.
Always get the best -- with DAP Audio !

Thank you!

Dap Audio

Dap Audio DS-CM-8™ Product Guide

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WARNING

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOUR INITIAL START-UP!

Unpacking Instructions

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present, and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Your shipment includes:

- DAP DS-CM-8
- IEC power cable – 1,65m
- USB cable – 1,40m
- User manual

CAUTION!

Keep this system away from rain and moisture!

SAFETY INSTRUCTIONS

Every person involved with the installation, operation and maintenance of this system has to:

- be qualified
- follow the instructions of this manual

CAUTION! Be careful with your operations.
With a dangerous voltage you can suffer
a dangerous electric shock when touching the wires!

Before you initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the system.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

Please consider that damages caused by manual modifications to the system are not subject to warranty.

This system contains no user-serviceable parts. Refer servicing to qualified technicians only.

IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the system.

- Never let the power-cord come into contact with other cables! Handle the power-cord and all connections with the mains with particular caution!
- Never remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.

- Never leave any cables lying around.
- Do not insert objects into air vents.
- Do not connect this system to a dimmerpack.
- Do not switch the system on and off in short intervals, as this would reduce the system's life.
- Do not open the device and do not modify the device.
- Do not drive the inputs with a signal level bigger, than required to drive the equipment to full output.
- Do not plug Mics into the console (or stagebox) while Phantom Power is on. Also mute the monitor / Pa system when turning Phantom Power on or off. Allow the system to adjust for a couple of seconds, before setting the input gains.
- Only use system indoor, avoid contact with water or other liquids.
- Avoid flames and do not put close to flammable liquids or gases.
- Always disconnect power from the mains, when system is not used. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.
- Always operate the unit with the AC ground wire connected to the electrical system ground.
- Make sure you don't use the wrong kind of cables or defective cables.
- Make sure that the signals into the mixer are balanced, otherwise hum could be created.
- Make sure you use DI boxes to balance unbalanced signals; All incoming signals should be clear.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power-cord is never crimped or damaged. Check the system and the power-cord from time to time.
- Please turn off the power switch, when changing the power cord or signal cable, or select the input mode switch.
- Extreme frequency boosts in connection with a high input signal level may lead to overdriving your equipment. Should this occur, it is necessary to reduce the input signal level by using the INPUT control.
- To emphasize a frequency range, you don't necessarily have to move its respective control upward; try lowering surrounding frequency ranges instead. This way, you avoid causing the next piece of equipment in your sound path to overdrive. You also preserve valuable dynamic reserve ("headroom")
- Avoid ground loops! Always be sure to connect the power amps and the mixing console to the same electrical circuit to ensure the same phase!
- If system is dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the system has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your system. Leave the system switched off until it has reached room temperature.
- If your Dap Audio device fails to work properly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Dap Audio dealer for service.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- For replacement use fuses of same type and rating only.
- WARRANTY: Till one year after date of purchase.

OPERATING DETERMINATIONS

This system is not designed for permanent operation. Consistent operation breaks will ensure that the system will serve you for a long time without defects.

If this system is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.
Any other operation may lead to dangers like short-circuit, burns, electric shock, etc.

You endanger your own safety and the safety of others!

Improper installation can cause serious damage to people and property !

Connection with the mains

Connect the device to the mains with the power-plug.
Always pay attention, that the right color cable is connected to the right place.

International	EU (including UK) From April 2004	North America	Pin
L	Brown	Black	Phase
N	Blue	White	Neutral
⏚	Green/Yellow	Green	Protective Earth

Make sure that the device is always connected properly to earth!

⚠ Return Procedure ⚠

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail aftersales@highlite.nl and request an RMA prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:
1) Your name
2) Your address
3) Your phone number
4) A brief description of the symptoms

Claims

The client has the obligation to check the delivered goods immediately upon delivery for any short-comings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.
It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.
Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless otherwise agreed in writing.
Complaints against us must be made known in writing or by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.
Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.

Description of the device

Features

Multifunctional Entertainment Mixer.

- 10 inputs
- 5 outputs
- Assignable crossfader
- Low, mid, high tone control for each channel
- LED VU-meters for Master and PFL signal

Overview

Front

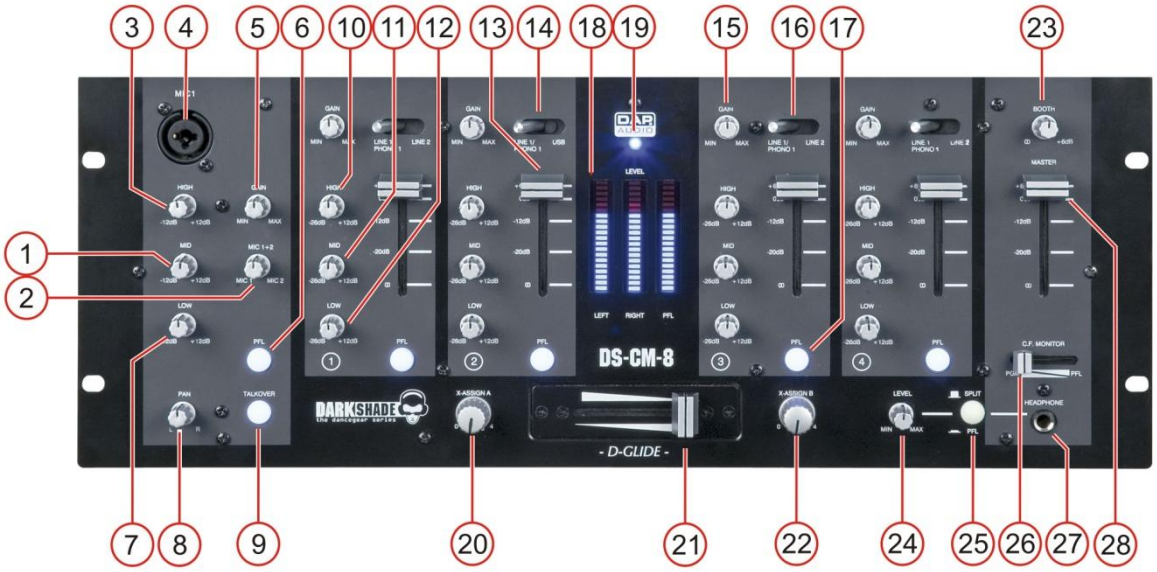


Fig. 1

1) Mic Channel Mid
2) Mic Selection Control
3) Mic Channel High
4) Mic Input Balanced Input
5) Mic Channel Gain
6) Mic channel PFL Switch
7) Mic Channel Low
8) Mic Channel Mid
9) Talkover Switch
10) Channel 1-4 PFL Swich
11) Channel 1-4 Mid
12) Channel 1-4 Low
13) Channel 1-4 Fader
14) Channel 2 Line 1/ Phono 1 – USB input selector
15) Gain Control
16) Channel 1, 3, 4 Phono 1 - line2 input selector
17) Channel 1-4 PFL Switch
18) VU-meter section
19) Power ON LED
20) X-assign A
21) Crossfader
22) X-assign B
23) Booth
24) Power Switch
25) Headphone Volume
26) PFL/ PGM
27) Headphone
28) Master Volume Fader

Backside

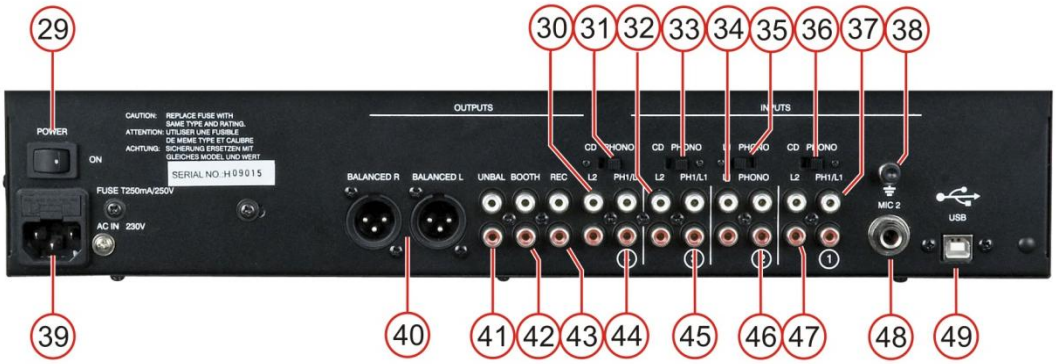


Fig. 2

29) Power Switch
30) Channel 4 L2 RCA Input
31) Channel 4 CD/ Phono Selector
32) Channel 3 L2 RCA Input
33) Channel 3 CD/ Phono Selector
34) Channel 2 L2 RCA Input
35) Channel 2 CD/ Phono Selector
36) Channel 1 CD/ Phono Selector
37) Channel 1 PH1/L1 RCA Input
38) GND
39) AC Inlet with integrated fuse holder
40) Master RCA Balanced Out
41) Master RCA Unbalanced Out
42) Booth RCA Out
43) Rec RCA Out
44) Channel 4 PH1/L1 RCA Input
45) Channel 3 PH1/L1 RCA Input
46) Channel 2 PH1/L1 RCA Input
47) Channel 1 L2 RCA Input
48) Mic 2 Jack Unbalanced Input
49) USB port

Installation

Remove all packing materials from the DS-CM-8. Check that all foam and plastic padding is removed. Connect all cables.

Always disconnect from electric mains power supply before cleaning or servicing.
Damages caused by non-observance are not subject to warranty.

Functions

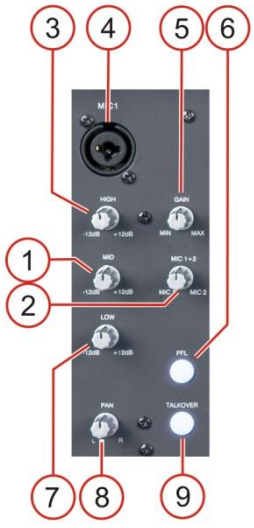


Fig 3.

1 /3 / 7. EQ HIGH/MID/LOW
The mic channel is fitted with 3-band EQ. The upper (**3**) and lower (**7**) shelving controls have their frequencies fixed at 10 Khz and 100 Hz respectively. The Mid range control (**1**) has a center frequency of 1 kHz. All 3 bands have up to 12 dB cut and boost, with a centre detent for "OFF". Turning the Equalizer level control to the right amplifies the frequency range, turning to the left attenuates the signal. Minor changes to the Equalizer control usually produce the best results. Try to avoid excessive enhancement of the MID band.

2. Mic Selection
Mixes Mic 1 and Mic 2. If the conrol is set completely to the left only Mic 1 Will be heard. If the control is turned completely to the right, only Mic 2 will be heard.

4. Mic
Electronically balanced XLR-type input for connecting low impedance microphone. The input has extremely low noise. When connecting a microphone make sure that the pin assignment is correct. Always make sure to read the manual of the microphone you want to connect. The Mic- input is not suitable for connecting an additional mixing console, FX-unit, etc. You have to use one of the LINE- inputs, when connecting this kind of equipment.

Note: When connecting signal sources, please make sure that the corresponding channel faders and the master faders are at minimum settings. Otherwise, unpleasant plug-in noise can occur.

5. Mic Gain

Use this control to match the connected microphones optimally to your DS-CM-8.

6. PFL

The PFL button (pre fade listening) is designed to route the Mic channel input to the monitor section independent of the individual channel's volume fader setting. It is possible to assign more than one channel simultaneously to the PFL bus.

8. PAN

By using the PAN control you can change the input signal's position within the stereo image. When the PAN control is set to center position, the audio signal is equal for both the left and right bus.

9. Talkover Button

With this button pressed, the talkover function is activated and channel 1-4 are attenuated 12dB.

Fig. 4

10 /11 / 12. EQ HIGH/MID/LOW

The mixer's Equalizer section allows shaping of the outgoing audio signal. Channels 1-4 are fitted with a 3-band EQ. The upper shelving control's **(10)** frequency shifts with the boost/ cut range from 70Hz at -26dB to 100Hz at +12dB. The Lower shelving control's **(12)** frequency shifts with the boost/ cut range from 20kHz at -22dB to 10kHz at +12dB. The Mid range control **(11)** has a center frequency of 2.5 kHz. The Mid band can be boost or cut with 12dB. All 3 bands have a centre detent for "OFF". Turning the Equalizer level control to the right amplifies the frequency range, turning to the left attenuates the signal. Minor changes to the Equalizer control usually produce the best results. Try to avoid excessive enhancement of the MID band.

13. Channel Fader

A logarithmic 45mm fader, which controls the volume of its' channel. The faders should be positioned within range of -12dB to 0dB, leaving you with sufficient room to allow precise matching of differences in the channel's level settings. The overall volume is set with the master fader. Even though the channel faders offer an additional gain of +6dB, it is better not to exceed the +0dB position by default.

14. Selection Switch (Line 1/Phono 1 - USB)

With this switch you can select between two sets of inputs per channel.

15. Gain

Use this control to match the connected devices optimally to your DS-CM-8. Turn the gain control all the way to the left at minimum position, the channel and master faders to 0dB. Adjust the gain with a loud input signal in such a way that the Master VU- meter RED leds do not light.

16. Selection Switch (Line 1/Phono - Line 2)

With this switch you can select between two sets of inputs per channel. Set the L1/PHONO **(31, 33, 35, 36)** selector in phono position if you want to connect a turntable. To the PHL1 **(44, 45, 37)** or the Phono **(46)** input on the rearpanel.

17. PFL

The PFL button (pre fade listening) is designed to route the channel input to the monitor section independent of the individual channel's volume fader setting. It is possible to assign more than one channel simultaneously to the PFL bus.

Fig. 5

Fig. 6

Fig. 7

18. Output Signal VU Meter
The DS-CM-8 features 3 VU-meters. This meter is a multi-step LED; The level indication allows you to monitor the Left and Right output and the PFL signal level at anytime, and match with other devices.

19. Power LED
Indicates that the DS-CM-8 is active.

20. X-assign A
Use this switch to assign the Right-side of the **crossfader (21)** to an input channel (zero is Off).

21. Crossfader
The crossfader allows you to mix evenly from one channel to another channel.

22. X-assign B
Use this switch to assign the Left-side of the **crossfader (21)** to an input channel (zero is Off).

23. Booth Control
This control allows you to adjust the volume of the **Booth** output **(43)**.
Use to set the balance between the Left and right master output.

24. Headphones Volume
This control allows you to adjust the headphones' volume.

25. PFL Split/ Blend Switch
This switch controls the routing to your headphone. In **split** mode the PFL signal is send to the Left ear of the headphone connected to the **Headphone output (27)** the Master signal is send to the Right ear of the headphone. In **Blend** mode the PFL and master signal are send to both ears of the headphone.

26. CF Monitor
Use this control to make a headphone mix between your PFL and your master signal.

27. Headphone
You can connect a pair of headphones with an impedance of 32 - 600 Ohm to the headphones connector. It is a 6,3mm/ 1/4" TRS socket, wired as Tip=left, Ring=right and sleeve = ground.
Caution: Depending on the type of headphones connected to the Headphones jack, the DS-CM-8 is capable of producing high output levels via the phones output. Therefore, make sure to turn the control all the way to the left (minimum setting) before connecting the headphones. Be aware of the fact that listening to loud sound pressure levels over a longer period of time leads to hearing-damage!

28. Master
You can adjust the output signal to the Master Outputs (**40/41**).

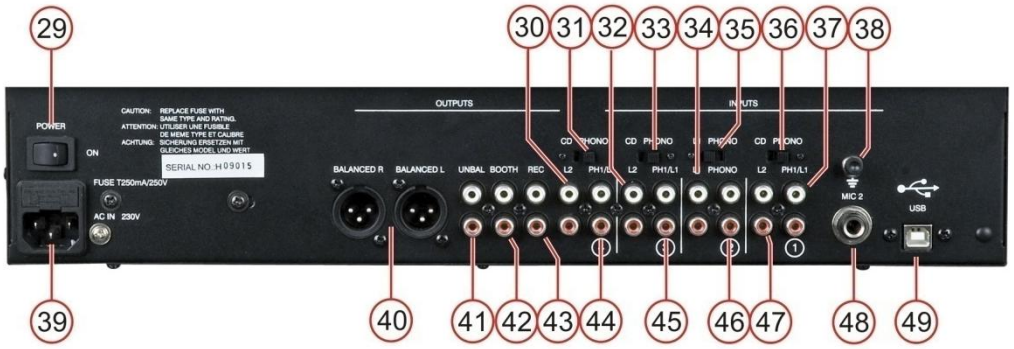


Fig. 8

29. Power Switch

30. Channel 4 L2 RCA Input
Use to connect a line level device.

31. Channel 4 CD/PHONO Selector
Used to set the input level for the **PHL1** Input **(52)** to either phono or line level.

32. Channel 3 L2 RCA Input
Use to connect a line level device.

33. Channel 3 CD/PHONO Selector
Used to set the input level for the **PHL1** Input **(48)** to either phono or line level.

34. Channel 2 L1 RCA Input
Use to connect a line level device.

35. Channel 2 CD/PHONO Selector
Used to route either the **L1** or **PHONO** inputs to the **LINE 1/ PHONO – USB** switch **(14).**

36. Channel 1 CD/PHONO Selector
Used to set the input level for the **PHL1** Input **(52)** to either phono or line level.

37. Channel 1 PH/L1 RCA Input
Use to connect either a phono or line level device depending on the position of the Channel 1 **CD/ PHONO** switch **(38).**

38. GND
Use to connect the ground wire of your turntable.

39. AC Inlet with integrated fuse holder.
This connector is meant for the connection of the supplied main cord. Connect one end of the power cord to the connector, the other end to the mains, then turn on the power switch to operate the unit.
Note: Please make sure that the supply voltage matches the operation voltage before connecting the unit to mains. Replace the fuse only with a fuse of same specification (T250mA).

40. Master RCA balanced Out
Use these outputs to connect an amplifier with balanced inputs.

41. Master RCA Unbalanced Out
Use these outputs to connect an amplifier with unbalanced inputs.

42. Booth RCA Unbalanced Out
Use these outputs to connect you Booth monitor amplifier with unbalanced inputs.

43. Record RCA Unbalanced Out
Use these to connect a recording device.

44. Channel 4 PH1/L1 RCA Input
Use to connect a line level device.

45. Channel 3 PH/L1 RCA Input
Use to connect either a phono or line level device depending on the position of the Channel 3 **CD/ PHONO** switch **(36).**

46. Channel 2 PHONO RCA Input
Use to connect either a phono level device.
PHONO switch **(37).**

47. Channel 1 L2 RCA Input
Use to connect a line level device.

48. MIC 2 Jack Unbalanced Input
MIC 2 channel ¼" unbalanced microphone input.

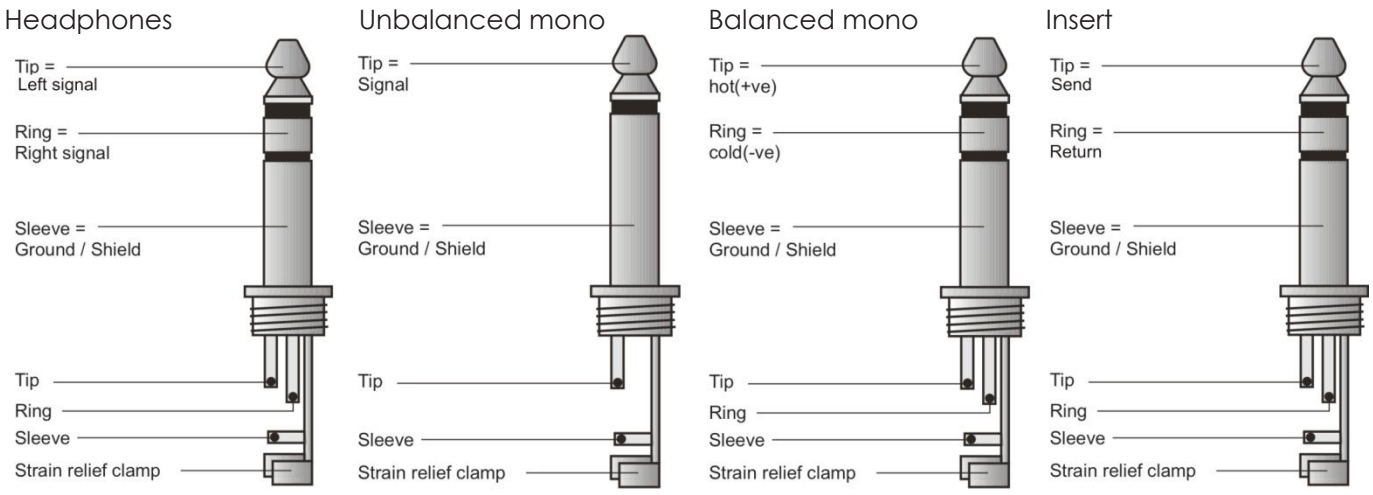
49. USB Aux In/ Out
This USB port can be used to connect the DS-CM-8 to your PC/ laptop. You can use this connector For playback or record with your favourate mediaplayer.

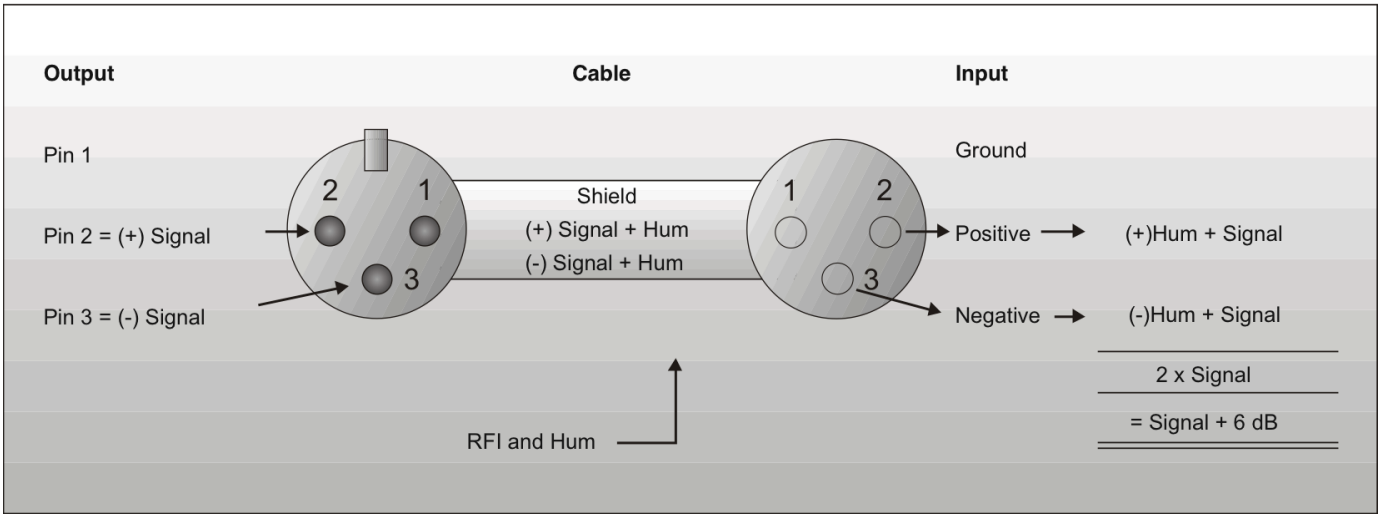
Set Up and Operation

Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

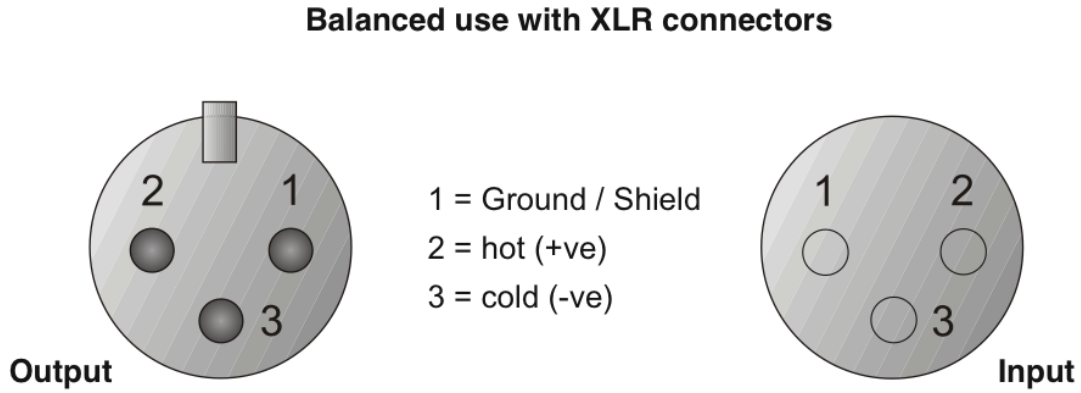
Connection Cables

Take care of your cables, always holding them by the connectors and avoiding knots and twists when coiling them: This gives the advantage of increasing their life and reliability.
Periodically check your cables. A great number of problems (faulty contacts, ground hum, discharges, etc.) are caused entirely by using unsuitable or faulty cables.





Compensation of interference with balanced connections



For unbalanced use PIN 1 and PIN 3 have to be bridged

Maintenance

The DAP Audio-CD-Player DS-CM-8 requires almost no maintenance. However, you should keep the unit clean. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Do not use alcohol or solvents.
Keep connections clean. Disconnect electric power, and then wipe the audio connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

Replacing a Fuse

Power surges, short-circuit or inappropriate electrical power supply may cause a fuse to burn out. If the fuse burns out, the product will not function whatsoever. If this happens, follow the directions below to do so.

1. Unplug the unit from electric power source.
2. Insert a flat-head screwdriver into a slot in the fuse cover. Gently pry up the fuse cover. The fuse will come out.
3. Remove the broken fuse. If brown or unclear, it is burned out.
4. Insert the replacement fuse into the holder where the old fuse was. Reinsert the fuse cover.
Be sure to use a fuse of the same type and specification. See the product specification label for details.

Replacing the crossfader

1. Unscrew the fader(B) screws. **Do not touch the innerscrews(C).** Carefully remove the old crossfader and unplug the cable.(D)
2. Plug in the new **Crossfader,** attach the cable (D)and place the new **Crossfader** back in the mixer.
3. Screw the **Crossfader** into the mixer using the fader plate screws.
4. Replace the fader knob.

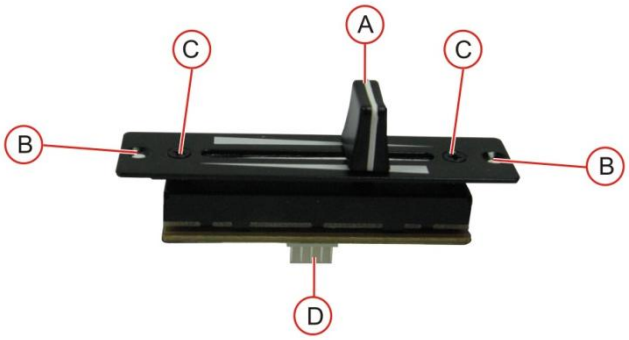


Fig. 9

Troubleshooting

DAP Audio-CD-Player DS-CM-8
This troubleshooting guide is meant to help solve simple problems. If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.

1. If the device does not operate properly, unplug the device.
2. Check power from the wall, all cables, connections, etc.
3. If all of the above appears to be O.K., plug the unit in again.
4. If nothing happens after 30 seconds, unplug the device.
5. Return the device to your DAP Audio dealer.

Product Specification

Model:		Dap Audio DS-CM-8
Power:		230V-50/60Hz
Fuse:		T250mA
Weight:		3,9 kg
Dimensions:		483 x 180 x 105mm (LxWxD)
Input sensitivity		mic: 3mV/ 1kΩ
		line: 3mV/ 47kΩ
		phono: 150mV/ 100kΩ
		aux: 150mV/ 100kΩ
Output level		master: 775mV/ 600Ω
		Record: 400mV/ 600Ω
		Phones: 400mV/ 8Ω
Frequency response:		20Hz – 20kHz
THD:		< 0,1%
Stereo separation:		>45dB
Signal/ noise ratio		mic: 75dB
		phono: 70dB
		line: 80dB
		aux: 80dB
Equalizer:	Mic Channel:	LOW +/-12dB at 100Hz
		MID +/-12dB at 1kHz
		HIGH +/-12dB at 10kHz
	Channel 1-4:	LOW -26dB at 70Hz/ +12dB at 100kHz
		MID -30dB at 1kHz/ +12dB at 1kHz
		HIGH -22dB at 20kHz/ +12dB at 10kHz

Design and product specifications are subject to change without prior notice.

CE

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Email: service@highlite.nl

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